1. An increased stiffness of vehicle structure comprising

a) a main vehicle body (20) having at least one door aperture (20.1, 20.1B, 20.1T, 20.1h, 20.1x) therein;

b) a mating vehicle door (8, 8B, 8T, 8h, 8x), generally representing a tailgate- (8T), sliding side-, cargo-, liftgate door, trunk cover (8x), hood (8h) or vehicle door (8, 8B), whose door frame, reinforced by at least two impact beams (1, 7, 1B, 7B), spanning the door aperture, elements and at least one window-guide (6, 6B, 6.1, 6.2, 6.1B, 6.2B, 6.1a, 6.2a, 6.1aB, 6.2aB) to guide and receive a window pane, is hingedly secured to that vehicle body (20) for pivotal movement between an open and a closed position;

c) interengaging assemblies, each of which includes a key arranged to a reinforced portion of that door frame, facing a vehicular member of that vehicle body, and a mating receptacle located thereon; and

d) adjusting mechanisms to reduce the clearances between the adjustable keys and the mating receptacles to minimum tolerances, when the vehicle door is closed, to ensure the engagement of the interengaging assemblies and the connection of the vehicular couples consisting of

- vehicle door & vehicle roof (17),
- vehicle door & side rail (18),
- vehicle door & pillar and
- vehicle door & flange (21, 21T, 21h, 21x) of vehicle body (20)

thus distributing impact energy to all vehicular members, lowering stress thereof and preventing passengers from being hurled out of the vehicle in the event of an accident.

2. An increased stiffness of vehicle structure comprising

a) a main vehicle body (20) having at least three door apertures (**20.1, 20.1B, 20.1T, 20.1h, 20.1x**), two of which are series-connected, therein;

b) three mating vehicle doors (**8, 8B, 8T, 8h, 8x**), each of which generally representing a tailgate- (**8T**), sliding side-, cargo-, liftgate door, trunk cover (**8x**), hood (**8h**) or vehicle door (**8, 8B**), whose door frame, reinforced by at least two impact beams (**1, 7, 1B, 7B**), spanning the door aperture, elements and at least one window-guide (**6, 6B, 6.1, 6.2, 6.1B, 6.2B, 6.1a, 6.2a, 6.1aB, 6.2aB**) to guide and receive a window pane, is hingedly secured to that vehicle body (20) for pivotal movement between an open and a closed position;

c) interengaging assemblies, each of which includes a key arranged to a reinforced portion of that door frame, facing a vehicular member of that vehicle body, and a mating receptacle located thereon;

d) at least one extension member (**17.3, 18.3, 23**), mounted to a common pillar of the series-connected vehicle doors, to receive at least two keys mating to the receptacles, located on the respective reinforced portions of those doors, when closed, for exploiting the constrained deformation thereof to prevent them from popping open in the event of an accident; and

e) adjusting mechanisms to reduce the clearances between the adjustable keys and the mating receptacles to minimum tolerances, when the vehicle doors are closed, to ensure the engagement of the interengaging assemblies and the connection of the vehicular couples consisting of

- vehicle door & vehicle roof (**17**),
- vehicle door & side rail (**18**),
- vehicle door & pillar,
- series-connected vehicle doors & common pillar and

– vehicle door & flange **(21, 21T, 21h, 21x)** of vehicle body **(20)**

thus distributing impact energy to all vehicular members, lowering stress thereof and preventing passengers from being hurled out of the vehicle in the event of an accident.

3. An increased stiffness of vehicle structure comprising

a) a main vehicle body **(20)** having at least one door aperture **(20.1, 20.1B, 20.1T, 20.1h, 20.1x)** therein;

b) a mating vehicle door **(8, 8B, 8T, 8h, 8x)**, generally representing a tailgate- **(8T)**, sliding side-, cargo-, liftgate door, trunk cover **(8x)**, hood **(8h)** or vehicle door **(8, 8B)**, whose door frame, reinforced by at least two impact beams **(1, 7, 1B, 7B)**, spanning the door aperture, elements and at least one window-guide **(6, 6B, 6.1, 6.2, 6.1B, 6.2B, 6.1a, 6.2a, 6.1aB, 6.2aB)** to guide and receive a window pane, is hingedly secured to that vehicle body **(20)** for pivotal movement between an open and a closed position;

c) interengaging assemblies, each of which includes a key arranged to a reinforced portion of that door frame, facing a vehicular member of that vehicle body, and a mating receptacle located thereon; and

d) adjusting mechanisms to reduce the clearances between the adjustable keys and the mating receptacles to minimum tolerances, when the vehicle door is closed, to ensure the engagement of the interengaging assemblies and the connection of the vehicular couples, at least one thereof has a plurality of interengaging assemblies operating at least at two planes, consisting of

– vehicle door & vehicle roof **(17)**,

– vehicle door & side rail **(18)**,

– vehicle door & pillar and

– vehicle door & flange **(21, 21T, 21h, 21x)** of vehicle body **(20)**

thus distributing impact energy to all vehicular members, lowering stress thereof and preventing passengers from being hurled out of the vehicle in the event of an accident.

4. An increased stiffness of vehicle structure comprising

a) a main vehicle body **(20)** having at least one door aperture **(20.1, 20.1B, 20.1T, 20.1h, 20.1x)** therein;

b) a mating vehicle door **(8, 8B, 8T, 8h, 8x)**, generally representing a tailgate- **(8T)**, sliding side-, cargo-, liftgate door, trunk cover **(8x)**, hood **(8h)** or vehicle door **(8, 8B)**, whose door frame, reinforced by at least two impact beams **(1, 7, 1B, 7B)**, spanning the door aperture, elements and at least one window-guide **(6, 6B, 6.1, 6.2, 6.1B, 6.2B, 6.1a, 6.2a, 6.1aB, 6.2aB)** to guide and receive a window pane, is hingedly secured to that vehicle body **(20)** for pivotal movement between an open and a closed position;

c) interengaging assemblies, each of which includes a key arranged to a reinforced portion of that door frame, facing a vehicular member of that vehicle body, and a mating receptacle located thereon, when the vehicle door is closed, to ensure the engagement of the interengaging assemblies and the connection of the vehicular couples, at least one thereof has a plurality of interengaging assemblies operating at least at two planes, consisting of

- vehicle door & vehicle roof **(17)**,
- vehicle door & side rail **(18)**,
- vehicle door & pillar and
- vehicle door & flange **(21, 21T, 21h, 21x)** of vehicle body **(20)**

thus distributing impact energy to all vehicular members, lowering stress thereof and preventing passengers from being hurled out of the vehicle in the event of an accident.

5. An increased stiffness of vehicle structure comprising

a) a main vehicle body (20) having at least three door apertures (**20.1, 20.1B, 20.1T, 20.1h, 20.1x**), two of which are series-connected, therein;

b) three mating vehicle doors (**8, 8B, 8T, 8h, 8x**), each of which generally representing a tailgate- (**8T**), sliding side-, cargo-, liftgate door, trunk cover (**8x**), hood (**8h**) or vehicle door (**8, 8B**), whose door frame, reinforced by at least two impact beams (**1, 7, 1B, 7B**), spanning the door aperture, elements and at least one window-guide (**6, 6B, 6.1, 6.2, 6.1B, 6.2B, 6.1a, 6.2a, 6.1aB, 6.2aB**) to guide and receive a window pane, is hingedly secured to that vehicle body (**20**) for pivotal movement between an open and a closed position;

c) at least one extension member (**17.3, 18.3, 23**), mounted to a common pillar of the series-connected vehicle doors, to receive at least two keys mating to the receptacles, located on the respective reinforced portions of those doors, when closed, for exploiting the constrained deformation thereof to prevent them from popping open in the event of an accident; and

d) interengaging assemblies, each of which includes a key arranged to a reinforced portion of that door frame, facing a vehicular member of that vehicle body, and a mating receptacle located thereon, when the vehicle door is closed, to ensure the engagement of the interengaging assemblies and the connection of the vehicular couples, at least one thereof has a plurality of interengaging assemblies operating at least at two planes, consisting of

- vehicle door & vehicle roof (**17**),
- vehicle door & side rail (**18**),
- vehicle door & pillar,
- series-connected vehicle doors & common pillar and
- vehicle door & flange (**21, 21T, 21h, 21x**) of vehicle body (**20**)

thus distributing impact energy to all vehicular members, lowering stress thereof and preventing passengers from being hurled out of the vehicle in the event of an accident.

6. An increased stiffness of vehicle structure according to claim **1**, wherein the interengaging assembly of vehicle door & vehicle roof **(17)** consists of

- at least two hooks **(15.6)** mounted to the window-guide elements **(6.1a, 6.2a, 6.3, 6.4** or **6.1aB, 6.2aB, 6.3B, 6.4B)**; and
- the mating rod **(17.1d)**, serving as key, arranged along that vehicle roof and mounted to two transverse girders **(17.2e, 17.2f, 17.2g)** connecting the pillars of both vehicle sides to each other.

7. An increased stiffness of vehicle structure according to claim **1**, wherein the interengaging assembly of vehicle door & side rail **(18)** consists of

- at least two hooks **(15.6)** mounted to the window-guide elements **(6.1a, 6.2a, 6.3, 6.4** or **6.1aB, 6.2aB, 6.3B, 6.4B)**; and
- the mating rod **(17.1d)**, serving as key, arranged along that side rail and mounted to two transverse girders **(17.2e, 17.2f, 17.2g)** connecting the pillars of both vehicle sides to each other.

8. An increased stiffness of vehicle structure according to claim **1**, wherein the interengaging assemblies of series-connected vehicle doors & vehicle roof **(17)** and series-connected vehicle doors & side rail **(18)** consist of

- at least eight hooks **(15.6)** mounted to the corresponding window-guide elements; and
- two mating rods **(17.1d)** arranged along that vehicle roof, side rail and mounted to three transverse girders **(17.2e, 17.2f, 17.2g)** connecting all pillars of both vehicle sides to each other.

9. An increased stiffness of vehicle structure according to claim **1**, wherein the adjustable interengaging assembly of vehicle door & pillar, whereto the door hinges are fastened, consists of

- a key **(15.1)** bolted to the intersection region of the pillar and roof, which is reinforced by a plate **(17.1c)** and transverse girder **(17.2d)** connecting the pillars of both vehicle sides to each other; and
- the mating hole arranged to the window-guide element **(6.1a, 6.2a, 6.1aB, 6.2aB)** .

10. An increased stiffness of vehicle structure according to claim **1**, wherein the adjustable interengaging assemblies of vehicle door & vehicle roof consist of

- a key **(15.2a)**, bolted to an element **(6.11)** rigidly attached to the respective window-guide element **(6.1a, 6.2a, 6.3, 6.4, 6.1aB, 6.2aB, 6.3B, 6.4B)**, and a plurality of the keys **(15.2)**, bolted to the respective window-guide elements; and
- the mating holes arranged to the vehicle roof **(17)**, reinforced by a plate **(17.1, 17.1a)** and transverse plate **(17.2a)** connecting the pillars of both vehicle sides to each other.

11. An increased stiffness of vehicle structure according to claim **1**, wherein the interengaging assemblies of vehicle door & side rail consist of

- a plurality of keys **(15.4, 15.4a)** mounted to the respective window-guide elements **(6.1a, 6.2a, 6.3, 6.4, 6.1aB, 6.2aB, 6.3B, 6.4B)**; and
- the mating holes arranged to the side rail **(18)** reinforced by an element **(18.1, 18.1a)**.

12. An increased stiffness of vehicle structure according to claim **1**, wherein the interengaging assemblies of vehicle door & vehicle roof and vehicle door & side rail consist of

- a plurality of keys **(15.2, 15.4, 15.4a)** mounted to the respective window-guide elements **(6.1a, 6.2a, 6.3, 6.4, 6.1aB, 6.2aB, 6.3B, 6.4B)**; and
- the mating holes arranged to the vehicle roof **(17)**, reinforced by the plate **(17.1a)**, and to the side rail **(18)**, reinforced by the element **(18.1, 18.1a)**.

13. An increased stiffness of vehicle structure according to claim 1, wherein the adjustable interengaging assemblies of vehicle doors & flange **(21)** of vehicle body **(20)** consist of

- a plurality of keys **(30, 32, 35)** bolted to the reinforced flange **(21)** of vehicle body **(20)**; and
- the mating holes arranged to the housings **(6.5, 6.5B)** rigidly attached to the window-guide elements **(6, 6B)**, elements **(6.6b, 6.7b, 6.8)** and impact beams **(7, 7B)**, respectively.

14. An increased stiffness of vehicle structure according to claim 1, wherein an element **(6.5C)**, whose contour is adapted to the door-contour, is rigidly attached to the window-guide element **(6B)** and impact beams **(1B, 7B)**.

15. An increased stiffness of vehicle structure according to claim **14**, wherein the adjustable interengaging assemblies consist of

- a plurality of keys **(37)** bolted to the rear flange **(21)** of vehicle body **(20)** reinforced by an element **(21.4B, 21.6B, 21.5B)**; and
- the mating holes arranged to the door-contour-shaped element **(6.5C)**.

16. An increased stiffness of vehicle structure according to claim 1, wherein the hook **(15.6)**, adjustable from outside the vehicle, comprises a screw **(15.21)**, a number of spacers **(15.22)**, washer **(15.24)**, nut **(15.25)** and a hook with interior diameter d_1 and a gap s_1.

17. An increased stiffness of vehicle structure according to claim **1**, wherein the key, adjustable from outside the vehicle, comprises mechanical connection elements such as a screw **(15.14)**, large washer **(15.13)** with outer diameter D, a number of spacers **(15.12)** and a sleeve **(15.11)**, both have a total length l.

18. An increased stiffness of vehicle structure according to claim **17**, wherein the sleeve **(15.11)** of the key with exterior diameter d is governed by the equation $D \geq d \geq d_R$, where D is the exterior diameter of washer **(15.13)** and d_R is the diameter of spacer **(15.12)** and sleeve.

19. An increased stiffness of vehicle structure according to claim **17**, wherein the front region of washer **(15.13)** has radial teeth.

20. An increased stiffness of vehicle structure according to claim **17**, wherein the washer is an integral part of a screw.

21. An increased stiffness of vehicle structure according to claim **1**, wherein both ends of the U-shaped window-guide element **(6, 6B)**, facing the lower vehicular member of vehicle body **(20)**, and an upper portion of that window-guide element, facing the upper vehicular member of vehicle body **(20)**, accommodate the members of interengaging assemblies.

22. An increased stiffness of vehicle structure according to claim **21**, wherein both ends of the respective stiff U-shaped window-guide element **(6, 6B)** are connected to each other by an element **(6.4, 6.4B)**.

23. An increased stiffness of vehicle structure according to claim **1**, wherein the window-guides **(6.1, 6.2, 6.1B, 6.2B)** are rigidly attached to the respective stiff window-guide elements **(6.1a, 6.2a, 6.1aB, 6.2aB)**.

24. An increased stiffness of vehicle structure according to claim **1**, wherein the adjustable interengaging assemblies of vehicle door & pillar, whereto the vehicle door hinges are fastened, consist of

- a plurality of keys **(31, 36)** bolted to an element **(6.6a, 6.8)** rigidly attached to the window-guide element **(6, 6B)** and impact beams **(1, 1B, 7, 7B)**; and
- the mating holes arranged to the pillar reinforced by an extension member **(23)** and adjacent to that window-guide element.

25. An increased stiffness of vehicle structure according to claim **2**, wherein the adjustable interengaging assemblies of series-connected vehicle doors & common pillar are defined by

- at least one pair of keys **(15.3, 15.3a)** bolted to both legs of extension member **(17.3)** mounted to the common pillar, reinforced by a plate **(17.1b)**, arranged along the vehicle roof **(17)** and attached rigidly to a transverse girder **(17.2c)**, connecting the common pillars of both vehicle sides to each other; and
- the mating holes arranged to both window-guide elements of series-connected vehicle doors adjacent to that common pillar.

26. An increased stiffness of vehicle structure according to claim **2**, wherein the adjustable interengaging assemblies of series-connected vehicle doors & common pillar are defined by

- at least one pair of keys **(15.5, 15.5a)** bolted to both legs of extension member **(18.3)** mounted to the common pillar, reinforced by an element **(18.1b)**, arranged along the side

rail (18) and attached rigidly to a transverse girder (18.2), connecting the common pillars of both vehicle sides to each other; and

- the mating holes arranged to both window-guide elements of series-connected vehicle doors adjacent to that common pillar.

27. An increased stiffness of vehicle structure according to claim **26**, wherein a belt case (26) is accommodated in the extension member (18.3).

28. An increased stiffness of vehicle structure according to claim **3**, wherein the adjustable interengaging assemblies of vehicle door (8) & pillar, operating in two planes, are defined by

- a plurality of keys (33) bolted to the window-guide element and a plurality of keys (34) bolted to an element (6.7a) rigidly attached to the window-guide element (6) and impact beams (1, 7); and
- the mating receptacles arranged to the reinforced pillar.

29. An increased stiffness of vehicle structure according to claim **3**, wherein the adjustable interengaging assemblies of vehicle door (8, 8B) & pillar, operating in three planes, are defined by

- a plurality of keys (15.1) rigidly arranged to the reinforced pillar, whereto the door frame is hingedly secured, and a plurality of keys (30, 31, 35, 36) rigidly arranged to the reinforced flange of vehicle body (20); and
- the mating receptacles arranged to the window-guide element (6.1a, 6.2a), elements (6.6a, 6.8) and housings (6.5, 6.5B), respectively.

30. An increased stiffness of vehicle structure according to claim 3, wherein the adjustable interengaging assemblies of vehicle door **(8, 8B)** & side rail **(18)**, operating in three planes, are defined by

- a plurality of keys **(15.4a)** rigidly arranged to the side rail **(18)** and at least two keys **(30, 32, 35, 37)** rigidly arranged to the reinforced flange **(21)** of vehicle body **(20)**; and
- the mating receptacles arranged to the window-guide elements **(6.1a, 6.2a, 6.3, 6.4, 6.1aB, 6.2aB, 6.3B, 6.4B)**, door-contour-shaped element **(6.5C)** and housings **(6.5, 6.5B)**, respectively.

31. An increased stiffness of vehicle structure according to claim 4, wherein the interengaging assemblies of vehicle door **(8, 8B)** & vehicle roof **(17)**, operating in four planes, are defined by

- a plurality of keys **(15.2, 15.2a)** rigidly arranged to the respective window-guide elements **(6.1a, 6.2a, 6.3, 6.4, 6.1aB, 6.2aB, 6.3B, 6.4B)** and at least two keys **(30, 32, 35, 37)** rigidly arranged to the reinforced flange **(21)** of vehicle body **(20)**; and
- the mating receptacles arranged to the reinforced vehicle roof **(17)** and that window-guide elements, respectively.

32. An increased stiffness of vehicle structure according to claim 4, wherein the interengaging assemblies of connecting vehicular couples, operating in multi-planes, are defined by

- a plurality of keys **(15.1 to 15.7, 30, 32, 35, 37)** rigidly arranged to the reinforced pillar, reinforced vehicle roof, reinforced side rail and reinforced flange of vehicle body, respectively; and
- the mating receptacles arranged to the reinforced portions of vehicle doors, respectively.

33. An increased stiffness of vehicle structure according to claim **5**, wherein the interengaging assemblies of series-connected vehicle doors & common pillar, operating in multi-planes, are defined by

- a plurality of keys **(15.3, 15.3a, 15.5, 15.5a)** rigidly arranged to the extension members **(17.3, 18.3, 23)** of the common pillar and a plurality of keys **(33, 34, 36)** rigidly arranged to the reinforced portions of series-connected vehicle doors, respectively; and
- the mating receptacles arranged to the reinforced portions of series-connected vehicle doors and the reinforced common pillar, respectively.

34. An increased stiffness of vehicle structure, characterised by use of metal, compound material, glass fibre reinforced material or non-metal material for material of the engaging key, receptacle, window-guide element, element, transverse girder, rod, plate and extension member.